

OPERATIVE METHOD FOR TREATMENT OF PATELLAR CHONDROMALATIA

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PC usually appears as a joint disorder during the second decade of life and mainly with women. The etiology of the disease is still unknown in details. There are numerous theories. Recently, more authors pay attention to the unstable extensor mechanism with an expressed lateralization of tuberositas tibiae (TT), subluxation of the patella and an increased tension in the femuro-patellar joint.

Roux (1888) and Hauser (1938) replace the patellar tendon from its place to another one in the tibia, where it is reimplanted medially and distally together with a totally osteotomized tuberositas tibiae; there is a bolt fixation in the new place. Their method was directed to the treatment of luxation, but later it was suggested also for the treatment of PC ((Harrison, 1955; Willner, 1970; Devas, Golski, 1973; Vanek et al., 1975). The operation preserves the femuro-patellar joint from luxation, but not from osteoarthritis. Pure medialization is not enough for the treatment of all cases with PC.

Maquet (1963) and Bandi (1974) osteotomize the TT with length from crista tibiae and then they ventralize it with placing under it a bone transplant from the iliac bone. The so depicted operative technique found its supporters; some of the authors modify it mainly concerning the type and form of the transplant (Kaufer, 1971; Bentley, 1971; Steinhäuser, 1978; Perquson et al., 1979). Our opinion is that the ventralization of the extensor apparatus is an acceptable method for the treatment of PC for the decrease of compression in the femuro-patellar joint, but certain disadvantage is the impossibility for removing the side motions and subluxative sliding of the patella.

Our operative technique for treatment of PC is by using an alignment of the extensor apparatus of the patella and decompression of the femuro-patellar joint.

The operative method consists of definite decompression in the femuro-patellar joint by means of resection of the chondral part of the patella, perforation of its other part and ventralization of tuberositas tibiae by cortico-spongy cut and alignment of the extensor apparatus by medialization of TT and its fixation with 2 bolts; there is no cut off in the fibrous-periosteal elongation of TT in distal direction (fig. 1, 2, 3, 4).

The advantages of the suggested method are the following:

There is a simultaneous process of medialization of the extensor apparatus and decompression of the femuro-patellar joint. The medialization of TT centralizes the patella and as a whole the patellar extensor apparatus, by means of which the patellar subluxations are taken away and patellar functions are thoroughly improved.

TT is osteosynthesized over the cortical part in medial position together with 1.5—2.0 cm sublocated bone-spongy tissue which contributes to ventralization and decompression of the femuro-patellar joint.

The resection of the chondral part of the patella also improves the ventralization and decompression of the femuro-patellar joint. The preservation of the elongation of TT in a distal direction by means of continuous bone-periosteal-fibrous length contributes to the strength of the extensor apparatus when TT migrates.

A deperiostiation in the place of transposition of TT is made, but without cutting a special bed. The covering of transpositioned TT by deperiostiated lambo tends to a better recreation in its new location.

Before the osteotomy of TT two holes are made there by means of a borer. All that, made in advance, improves the fixation of TT in the new place by two bolts.

The boring of the resected surface of the patella with 5—6 holes improves the blood-stream and supports the newly formed fibrous connective-tissue membrane over the spongy part of the patella.

The esthetic appearance of the patella and TT region is rather acceptable.

The stability of the ventralized and medialized TT makes possible movements of the patella only 2 weeks after operation which contributes to a functional ability of the lower extremity.

The aforementioned operative method was applied to 6 of our patients. An alinement of the extensor apparatus of the patella and decompression of the femuro-patellar joint was achieved. Right after taking off the operative threads we suggested movements of the patella, even walking. As for the esthetics of the patella it was quite promising.

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ОПЕРАТИВНЫЙ МЕТОД ЛЕЧЕНИЯ ХОНДРОМАЛЯЦИИ НАДКОЛЕННИКА

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РЕЗЮМЕ

Описаны различные методы лечения хондромалиции надколенника. По оперативному методу Roux—Houser достигается медиализация бугорка большеберцовой кости и его закрепление в созданном ложе, чем осуществляется вентрализация экстензорного аппарата. Оперативный метод Maquet—Bandi обеспечивает вентрализацию разгибательного аппарата без его медиализации.

В настоящей работе представлен оперативный метод, обеспечивающий как медиализацию, так и вентрализацию разгибательного аппарата посредством удаления бугорка большеберцовой кости вместе с 1,5—2 см спонгиоза. Описана также медиализация разгибательного аппарата и его закрепление в корке метафиза большеберцовой кости без перерывания его фиброноperiостального продолжения. Таким методом прооперировано 6 больных с очень хорошим результатом.